

Am ndments to the Claims

This listing of claims will replace all prior versions,  
and listings, of claims in the application:

Claims 1-6 (canceled)

1 Claim 7 (original): A distance-measuring device  
2 comprising:  
3 a distance-measuring optical system for dividing an  
4 image of a subject into two images;  
5 image pick up sensors formed on a semiconductor  
6 substrate for pick upping the two images;  
7 a processing circuit formed on the semiconductor  
8 substrate for summing outputs of the image pick  
9 up sensors in a predetermined direction into  
10 one-dimensional data; and  
11 a control circuit for detecting a main subject from  
12 the one-dimensional data output from the processing  
13 circuit, and setting a distance-measuring area for the  
14 main subject.

1 Claim 8 (original): A distance-measuring device  
2 comprising:  
3 a distance-measuring optical system for dividing an  
4 image of a subject into two images;  
5 photographic sensors formed on a semiconductor  
6 substrate for pick upping the two images;

7 a processing circuit formed on the semiconductor  
8 substrate for summing outputs of the image pick  
9 up sensors in a predetermined direction into  
10 one-dimensional data;  
11 main subject detecting means for detecting a main  
12 subject from the one-dimensional data;  
13 setting means for setting a distance-measuring area  
14 for the main subject; and  
15 distance-measuring means for executing a distance  
16 measurement operation in the set distance-measuring area.

1 Claim 9 (original): A distance-measuring device  
2 comprising:  
3 two optical systems having a parallax therebetween;  
4 a photographic element formed on a semiconductor  
5 substrate for photographing two images formed by the  
6 optical systems;  
7 processing means formed on the semiconductor  
8 substrate for executing image processing on an output  
9 from the photographic element; and  
10 distance-measuring means for executing a distance  
11 measurement operation on the basis of the output from the  
12 processing means.

1 Claim 10 (original): A distance-measuring device  
2 comprising:  
3 two optical systems having a parallax therebetween;

*Claims  
9-11  
Previously  
Cancelled  
in the ancillary  
filed 4/28/03  
& confirmed  
via telephone  
interview  
10/29/03  
Dane  
2873*

4       a photographic element formed on a semiconductor  
5       substrate for photographing two images formed by the  
6       optical systems;  
7       processing means formed on the semiconductor  
8       substrate for executing image processing on an output  
9       from the photographic element;  
10       main subject detecting means for detecting a main  
11       subject on the basis of an output from the processing  
12       means; and  
13       distance-measuring means for executing a distance  
14       measurement operation on the basis of the output from the  
15       processing means and an output from the main subject  
16       detecting means.

1   Claim 11 (original): The distance-measuring device  
2   according to claim 10, wherein the processing means has a  
3   plurality of modes, and can individually set an output  
4   for the main subject detecting means and an output for  
5   the distance-measuring means.

1   Claim 12 (original): A distance-measuring device  
2   comprising:  
3       an AF area sensor formed on a semiconductor  
4       substrate for picking up two images formed to have  
5       a parallax therebetween, and integrating sensor data that  
6       corresponds to an appropriate amount of light;

7           a photo reception signal processing circuit formed  
8   on the semiconductor substrate for creating outline data  
9   based on the sensor data from the AF area sensor;  
10          a control section detecting a main subject in  
11   a photography screen on the basis of the outline data  
12   output from the photo reception signal processing  
13   circuit, and setting, in the photography screen, a  
14   distance-measuring area including the main subject; and  
15          a distance-measuring section for executing distance  
16   measurement in the distance-measuring area set by the  
17   control section.

1   Claim 13 (original): The distance-measuring device  
2   according to claim 12, wherein the AF area sensor  
3   includes:  
4          a pixel area in which photoelectric elements are  
5   arranged in a matrix, the photoelectric elements each  
6   receiving image for distance measurement formed by two  
7   photoelectric lenses located before the AF area sensor  
8   and having a parallax therebetween;  
9          a horizontal/vertical control circuit operable under  
10   the control of the control section for scanning and  
11   outputting an amount of the image for distance  
12   measurement accumulated by the photoelectric elements  
13   included in the pixel area;

14           an output circuit for amplifying, by a predetermined  
15   level, a signal output from the horizontal/vertical  
16   control circuit; and  
17           a sensor control circuit operable under the control  
18   of the control section for controlling received-image  
19   accumulation and output operation of the AF area sensor,  
20           the pixel area, the horizontal/vertical control  
21   circuit, the output circuit and the sensor control  
22   circuit being formed on a silicon substrate by a CMOS  
23   process.

1   Claim 14 (original): The distance-measuring device  
2   according to claim 13, wherein the horizontal/vertical  
3   control circuit of the AF area sensor sequentially  
4   applies a sensitivity control signal to the photoelectric  
5   elements in units of one row of the matrix, thereby  
6   extracting an amount of image for distance measurement  
7   accumulated by those of photoelectric elements, which are  
8   located in each column of the matrix, extracting only a  
9   column at which the amount of image for distance  
10   measurement changes, detecting, simultaneously and in  
11   a parallel manner, pieces of outline data each  
12   corresponding to one scanning line, and outputting  
13   the detection result as the outline data.

Claims 15-28 (canceled)